

April 29, 1994

FACT SHEET

PROPOSED RULES FOR MARINE TANK VESSEL LOADING OPERATIONS

TODAY'S ACTION...

- ◆ Under authority of the Clean Air Act Amendments of 1990, EPA is issuing a proposed rule to reduce air toxic emissions that result from marine tank vessel loading operations. Air toxics are those air pollutants that are known or suspected of causing cancer or other serious health effects. Marine tank vessels are used to transport crude oil, gasoline, and toxic chemicals.

WHAT ARE THE HEALTH AND ENVIRONMENTAL BENEFITS?

- ◆ The proposed rule would reduce emissions of air toxics by approximately 7,600 metric tons per year.
- ◆ The proposed rule would also reduce emissions of volatile organic compounds (VOCs) by approximately 70,000 metric tons per year. VOCs are key components in forming ground-level ozone, or smog.

WHY MARINE TANK VESSEL LOADING OPERATIONS?

- ◆ In 1985, the Coast Guard requested that the National Research Council evaluate the feasibility of controlling emissions from marine tank vessel loading operations. The Council concluded that controls were technically feasible, but that the Coast Guard would need to promulgate safety requirements before EPA set a uniform emissions requirement. The Coast Guard safety requirements were promulgated in June 1990.
- ◆ EPA was provided the authority to regulate marine vessel loading operations with the passage of the Clean Air Act Amendments of 1990. Specifically, EPA is required to regulate emissions of hazardous air pollutants and VOCs from

tank vessel loading or unloading operations.

WHO WOULD BE AFFECTED BY THE PROPOSED RULE?

- ◆ Affected facilities include new and existing marine bulk loading and unloading facilities.
- ◆ There are currently approximately 350 marine tank vessel loading facilities nationwide that will be affected by this regulation.

WHAT ARE THE RECOMMENDED CONTROL REQUIREMENTS?

- ◆ Terminals with an annual marine bulk loading throughput greater than or equal to 5 million barrels per year (bbl) of gasoline or 100 million bbl of crude oil will be required to control emissions of VOCs and hazardous air pollutants resulting from the loading of gasoline or crude oil. These facilities will be required to reduce emissions by a minimum of 95 percent.
- ◆ Facilities that have annual emissions of hazardous air pollutants exceeding 1 ton will be required to apply maximum achievable control technology (MACT) (i.e., an average emission limit of 93 percent for the terminal).
- ◆ Facilities seeking to control loading emissions under requirements for reasonably available control technology (RACT) or MACT using a combustion device will be required to operate the device at 98 percent efficiency. Facilities seeking to control loading emissions under RACT or MACT using a recovery device will be required to operate the device at 95 percent efficiency or, for gasoline vapors, reduce the control device outlet concentration to 1,000 ppm or less.
- ◆ Vessels loading at an affected facility must pass one of three vapor tightness tests.

Initial Performance Test

- ◆ An initial performance test is required of all combustion and recovery devices except (1) flares and (2) boilers or process heaters with a design heat input capacity of 44 megawatts (150 million Btu/hr) or greater.

- ◆ The proposed standards require the use of EPA Method 25 or 25A for performance tests.

Monitoring

- ◆ Facilities will be required to establish baseline monitoring criteria during the initial performance test and then monitor combustion temperature for combustion devices, VOC concentration in the exhaust stream outlet for carbon adsorbers, and exhaust stream temperature for condensers.
- ◆ Facilities will be required to monitor for the continuous presence of a flame and to monitor vent stream flow for flares.

Recordkeeping/Reporting

- ◆ The owner or operator of any marine vessel bulk loading operation subject to these standards will be required to fulfill the reporting and recordkeeping requirements of the air toxics General Provisions rule (40 CFR part 63 subpart A) unless otherwise specified in the regulation.
- ◆ Affected facilities will be required to submit a quarterly monitoring report for periods in which standards are exceeded.
- ◆ Facilities must keep records indicating that only vapor-tight vessels are loaded.
- ◆ Owners and operators will be required to maintain all records of compliance for 5 years.

HOW MUCH WOULD THE PROPOSED RULE COST?

- ◆ The total nationwide capital cost of the proposed standards is expected to be approximately \$850 million. The total nationwide annual cost for the proposed standards is expected to be approximately \$180 million.
- ◆ Maximum product price increases from the proposed standards are expected to be less than 0.55 percent.

FOR FURTHER INFORMATION

Anyone with a computer and a modem can download the rule from the Clean Air Act board of EPA's electronic Technology Transfer Network bulletin board by calling (919) 541-5742. For further information about how to access the board, call (919) 541-5384. For further information about the rule, contact David Markwordt at (919) 541-0837.